Complete Summary

TITLE

Diabetes mellitus: the percentage of patients with diabetes in whom the last HbA1c is 8 or less (or equivalent test/reference range depending on local laboratory) in the previous 15 months.

SOURCE(S)

British Medical Association (BMA) and NHS Employers. Quality and outcomes framework guidance for GMS contract 2009/10. London (UK): British Medical Association, National Health Service Confederation; 2009 Mar. 162 p.

Measure Domain

PRIMARY MEASURE DOMAIN

Outcome

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the Measure Validity page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of patients with diabetes in whom the last HbA1c is 8 or less (or equivalent test/reference range depending on local laboratory) in the previous 15 months.

RATIONALE

Diabetes mellitus is one of the common endocrine diseases affecting all age groups with over one million people in the United Kingdom (UK) having the condition. Effective control and monitoring can reduce mortality and morbidity. Much of the management and monitoring of diabetic patients, particularly patients with Type 2 diabetes is undertaken by the general practitioner and members of the primary care team. This measure is one of seventeen Diabetes Mellitus measures.

The Diabetes Mellitus indicators are based on widely recognised approaches to the care of diabetes. Detailed guidelines for health professionals are published by Diabetes UK and by SIGN - the Scottish Intercollegiate Guidelines Network. The SIGN website contains detailed evidence tables, and links to published articles. The English National Service Framework for Diabetes also includes details of the evidence behind a range of recommendations. The National Institute for Health and Clinical Excellence (NICE) has also published guidance on a number of aspects of diabetic control.

The indicators for diabetes are generally those which would be expected to be done, or checked in an annual review. There is no requirement on the general practitioner (GP) practice to carry out all these items (e.g. retinal screening), but it is the practice's responsibility to ensure that they have been done.

This set of indicators relates to both Type 1 and Type 2 diabetes. Although the care of patients with Type 1 diabetes may be shared with specialists, the general practitioner would still be expected to ensure that appropriate annual checks had been carried out.

The relationship between hyperglycaemia and cardiovascular risk is essentially linear, so for those with raised HbA1c levels, better glycaemic control should lead to reduced cardiac risk. For people with Type 1 diabetes, the finding of a 42% reduction in cardiovascular events in those treated intensively in the DCCT trial provides evidence for this (DCCT/EDICT, 2005). Similarly, 10 year follow-up data from the UKPDS trial showed significantly less cardiovascular disease in those patients with Type 2 diabetes who were intensively treated (Holman et al, 2008).

The three target levels for HbA1c (7%, 8% and 9%) are designed to provide an incentive to improve glycaemic control across the distribution of HbA1c values. The lower level may not be achievable for all patients, but the payment thresholds reflect this. Also, practitioners should note that in the 2008 guidance for Type 2 diabetes, NICE advises against pursuing highly intensive management to levels below 6.5% (NICE Guidance for Type 2 diabetes, 2008).

NICE identifies the following key priorities to help people with Type 2 diabetes achieve better glycaemic control:

- Offer structured education to every person and/or their carer at and around the time of diagnosis, with annual reinforcement and review. Inform people and their carers that structured education is an integral part of diabetes care.
- Provide individualised and ongoing nutritional advice from a healthcare professional with specific expertise and competencies in nutrition.
- When setting a target glycated haemoglobin:
    - Involve the person in decisions about their individual HbA1c target level, which may be above that of 6.5 % set for people with Type 2 diabetes in general
    - Encourage the person to maintain their individual target unless the resulting side effects (including hypoglycaemia) or their efforts to achieve this impair their quality of life
    - Offer therapy (lifestyle and medication) to help achieve and maintain the HbA1c target level

    - Inform a person with a higher HbA1c that any reduction in HbA1c towards the agreed target is advantageous to future health
    - Avoid pursuing highly intensive management to levels of less than 6.5%
- Offer self-monitoring of plasma glucose to a person newly diagnosed with Type 2 diabetes only as an integral part of his or her self-management education. Discuss its purpose and agree how it should be interpreted and acted upon.
- When starting insulin therapy, use a structured programme employing active insulin dose titration that encompasses: structured education, continuing telephone support, frequent self-monitoring, dose titration to target, dietary understanding, management of hypoglycaemia, management of acute changes in plasma glucose control, support from an appropriately trained and experienced healthcare professional.

Auditing the proportion of patients with an HbA1c below 8% is designed to provide an incentive to improve glycaemic control across the range of HbA1c values.

PRIMARY CLINICAL COMPONENT

Diabetes mellitus; HbA1c

DENOMINATOR DESCRIPTION

Patients with diabetes (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

Number of patients from the denominator in whom the last HbA1c is 8 or less (or equivalent test/reference range depending on local laboratory) in the previous 15 months

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Unspecified

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement
National reporting
Pay-for-performance

Application of Measure in its Current Use

CARE SETTING

Physician Group Practices/Clinics

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Group Clinical Practices

TARGET POPULATION AGE

Age greater than or equal to 17 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

See the "Rationale" field.

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Unspecified

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Patients with diabetes*

*__Note__: The Quality and Outcomes Framework (QOF) includes the concept of exception reporting. This has been introduced to allow practices to pursue the quality improvement agenda and not be penalised, where, for example, patients do not attend for review, or where a medication cannot be prescribed due to a contraindication or side-effect.

The following criteria have been agreed for exception reporting:

A. patients who have been recorded as refusing to attend review who have been invited on at least three occasions during the preceding twelve months
B. patients for whom it is not appropriate to review the chronic disease parameters due to particular circumstances, e.g., terminal illness, extreme frailty
C. patients newly diagnosed within the practice or who have recently registered with the practice, who should have measurements made within three months and delivery of clinical standards within nine months, e.g., blood pressure or cholesterol measurements within target levels
D. patients who are on maximum tolerated doses of medication whose levels remain suboptimal
E. patients for whom prescribing a medication is not clinically appropriate, e.g., those who have an allergy, another contraindication or have experienced an adverse reaction
F. where a patient has not tolerated medication
G. where a patient does not agree to investigation or treatment (informed dissent), and this has been recorded in their medical records

H. where the patient has a supervening condition which makes treatment of their condition inappropriate, e.g., cholesterol reduction where the patient has liver disease
I. where an investigative service or secondary care service is unavailable

Refer to the original measure documentation for further details.

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions
Patients with diabetes

Exclusions
Exclude those patients age 16 years and under and patients with gestational diabetes.

See "Description of Case Finding" field for exception reporting.

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition

DENOMINATOR TIME WINDOW

Time window is a single point in time

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions
Number of patients from the denominator in whom the last HbA1c is 8 or less (or equivalent test/reference range depending on local laboratory) in the previous 15 months

Exclusions
Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Laboratory data
Medical record
Registry data

LEVEL OF DETERMINATION OF QUALITY

Not Individual Case

OUTCOME TYPE

Clinical Outcome

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

External comparison at a point in time
Internal time comparison
Prescriptive standard

PRESCRIPTIVE STANDARD

Payment stages: 40-70%

EVIDENCE FOR PRESCRIPTIVE STANDARD

British Medical Association (BMA) and NHS Employers. Quality and outcomes framework guidance for GMS contract 2009/10. London (UK): British Medical Association, National Health Service Confederation; 2009 Mar. 162 p.

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

DM 24. The percentage of patients with diabetes in whom the last HbA1c is 8 or less (or equivalent test/reference range depending on local laboratory) in the previous 15 months

MEASURE COLLECTION

Quality and Outcomes Framework Indicators

MEASURE SET NAME

Diabetes Mellitus

DEVELOPER

British Medical Association
National Health Service (NHS) Confederation

FUNDING SOURCE(S)

The expert panel who developed the indicators were funded by the English Department of Health.

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

The main indicator development group is based in the National Primary Care Research and Development Centre in the University of Manchester. They are: Professor Helen Lester, NPCRDC, MB, BCH, MD; Dr. Stephen Campbell, NPCRDC, PhD; Dr. Umesh Chauhan, NPCRDC, MB, BS, PhD.

Others involved in the development of individual indicators are: Professor Richard Hobbs, Dr. Richard McManus, Professor Jonathan Mant, Dr. Graham Martin, Professor Richard Baker, Dr. Keri Thomas, Professor Tony Kendrick, Professor Brendan Delaney, Professor Simon De Lusignan, Dr. Jonathan Graffy, Dr. Henry Smithson, Professor Sue Wilson, Professor Claire Goodman, Dr. Terry O'Neill, Dr. Philippa Matthews, Dr. Simon Griffin, Professor Eileen Kaner.

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

None for the main indicator development group.

ENDORSER

National Health Service (NHS)

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2009 Mar

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

British Medical Association (BMA) and NHS Employers. Quality and outcomes framework guidance for GMS contract 2009/10. London (UK): British Medical Association, National Health Service Confederation; 2009 Mar. 162 p.

MEASURE AVAILABILITY

The individual measure, "DM 24. The Percentage of Patients with Diabetes in Whom the Last HbA1c is 8 or Less (or Equivalent Test/Reference Range Depending on Local Laboratory) in the Previous 15 Months," is published in the "Quality and Outcomes Framework Guidance." This document is available from the British Medical Association Web site.

NQMC STATUS

This NQMC summary was completed by ECRI Institute on September 29, 2009. The information was verified by the measure developer on December 17, 2009. The information was verified by the measure developer on March 4, 2010.

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